IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of	**MAIL STOP AF**
Johan Wanselin et al.	Group Art Unit: 1744
Application No.: 09/879,117	Examiner: Monzer R. Chorbaji
Filed: June 13, 2001	Confirmation No.: 3882
For: DEVICE FOR AN AUTOCLAVE	

PRE-APPEAL BRIEF REQUEST FOR REVIEW

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Further to the Notice of Appeal filed herewith, Applicants respectfully request review of the following grounds of rejection: 1) claims 1 and 11-15 under 35 U.S.C. § 103(a) over Huston et al. (U.S. Patent 3,407,027) in view of Hennebert et al. (U.S. Patent 4,764,351); 2) claims 2, 5, 6 and 19 under 35 U.S.C. § 103(a) over Huston et al. in view of Hennebert et al. and further in view of Spence (U.S. Patent 4,919,888); 3) claims 3, 4, 7-9 and 16-18 under 35 U.S.C. § 103(a) over Huston et al. in view of Hennebert et al. and Spence and further in view of Quehl (U.S. Patent 4,165,404); 4) claim 10 under 35 U.S.C. § 103(a) over Huston et al. in view of Hennebert et al., Spence and Quehl and further in view of Leimbacher et al. (U.S. Patent 5,837,181); and 5) claim 20 under 35 U.S.C. § 103(a) over Huston et al. in view of Hennebert et al. and further in view of Huston et al. (U.S. Patent 5,894,014).

MPEP § 2143 states: To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations.

The combination of Huston and Hennebert et al. fails to establish a *prima facie* case of obviousness against claim 1 because there is no teaching, suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to combine the references. Furthermore, even if the references were combined, such a combination would not include all the features of claim 1.

The Office Action on page 3, paragraph number 4, states that the outer shell 12, the end ring 15 and the end member 17 of Huston correspond to the housing of the autoclave device recited in claim 1. (See page 3, lines 4-5 of the December 14, 206 Office Action.) Applicants respectfully disagree.

The Office Action on page 3, paragraph number 4, states that the inner shell 14 of Huston corresponds to the sterilisation chamber recited in claim 1. (See page 3, lines 7, 10, 12, 13 and 15-16 of the Office Action.) Applicants respectfully disagree.

The Office Action states on page 4, lines 9-12 of the Office Action that "it would have been obvious to one of ordinary skill in the art at the time the invention was made to construct Huston chamber out of polymeric material as taught by Hennebert since plastic is low in cost and does not conduct electricity." Applicants respectfully disagree.

Huston discloses that the inner shell 14 and the fastening ring 25 may be made of a high quality corrosion resistant material while the outer shell 12 and the end ring 15 may be made of flange grade material which is lower in cost than the corrosion resistant material. Therefore, it is possible to make a structurally strong chamber utilizing the low cost material for structural strength while the lining (inner shell 14) and fastening ring are made up of more expensive material. See column 2, lines 16-24. Huston further discloses that utilizing this structure makes it possible to make the inner shell 14 thinner and to space the inner shell 14 and the outer shell 12 apart to obtain the required strength without regard to the length of the arms 20 of the door 11. See column 2, lines 33-39.

As further disclosed by Huston, the outer shell 12 is connected to the inner shell 14 at the door end by the end ring 15. The fastening ring 25 is welded at 23 to the end ring 15 and is welded to the inner shell at 29. The end ring 15 is welded to

the inner shell 14 at 27 and to the outer shell at 22. The outer shell 12 and the inner shell 14 are held in spaced relation by the stay bars 28.

The inner shell 14 of Huston is clearly permanently attached to the outer shell 12 through the end ring 15 an the welds 22, 23, 27, 29. The inner shell 14 is not releasably fastened to the autoclave outer shell 12 and thus the inner shell 14 does not correspond to the sterilisation chamber of claim 1. The outer shell 12, the end ring 15 and the end member 17 of Huston therefore do not correspond to the housing of claim 1.

Furthermore, Huston states that to obtain the strength required for large wall areas and high pressures, the working skins (i.e. the inner and outer shells) may be spaced apart according to strength requirements to obtain the proper stress design. See column 1, lines 37-42. Thus, one of ordinary skill in the art would not regard the inner shell 14 as a self supported structure, as recited in claim 1. Moreover, due to the high pressure operating conditions of the autoclave of Huston, the outer shell 12 must be present.

As disclosed in the above-identified application, in traditional autoclaves, a large amount of energy is consumed for heating the material in the metal chamber for each autoclaving cycle and there is a risk of burning for the personnel using the autoclave. See page 6, lines 5-14 of the instant application. As the autoclave of Huston is heated, the welds 22, 23, 27, 29 and the stay bars 28 etc will transfer the heat from the inner shell 14 to the outer shell 12. The time under which the inner shell 14 is heated and the high temperature will also cause natural convection via the gas/air present in the space between the inner and outer shells 12, 14 and between the inner shell 14 and end member 17.

Huston merely suggests a nickel clad inner shell 14 surrounded by a solid outer shell 12 of steel due to the heat and pressure conditions in the chamber. See column 1, lines 37-42. Thus, the autoclave of Huston is a traditional autoclave made of metal. Additionally, as nickel has a high heat conductibility (higher than steel), Huston actually teaches away from the present invention.

Although Hennebert et al. disclose that their treatment chamber 1 is made of plastic, one of ordinary skill in the art would not have been motivated to form the inner shell 14 of Huston of plastic material, given Huston's disclosure regarding the relationship of the inner shell 14 and the outer shell 12 to the strength of the

construction and given Huston's disclosure of permanently attaching the inner shell 14 to the outer shell 12 through the end ring 15 and the welds 22, 23, 27, 29.

The sterilization apparatus by Hennebert relates to low temperature sterilization (see column 2, lines 3 and 12-15), specifically formaldehyde gas sterilization. Formaldehyde sterilisation (see column 1, line 33) or ethylene oxide (column 1, line 23) are used when the objects to be sterilised cannot be subjected to elevated temperatures in conventional heat sterilization methods, i.e. cannot be sterilized in an autoclave. (See column 1, lines 14-23, in which Hennebert et al. disclose that recourse to gaseous sterilisation is essential for sterilising articles which cannot be subjected to elevated temperatures.) Thus, Hennebert clearly disclose that their treatment chamber 1 is not to be used for sterilisation carried out in an autoclave, i.e. under elevated temperatures, and therefore do not use the temperatures in combination with the pressures that are used in an autoclave.

Hennebert et al. further disclose, in column 5, lines 22-27, that the chamber that is of a plastic material is used under the requirement of subatmospheric pressure, and includes embedded electrical heating elements. Thus, Hennebert do not disclose the use of a plastic sterilisation chamber in an autoclave in any way. Briefly, autoclave sterilisation is a heat sterilisation wherein the temperature is at least 120°C, and preferably at least 134°C. If Hennebert et al. contemplated the use of a plastic chamber in an autoclave, there would be no need to include heating elements as the chamber would be heated during the sterilisation process. In other words, if the plastic chamber were to be used in an autoclave, why would Hennebert et al. provide heating elements to heat the chamber?

Thus, Hennebert do not teach a plastic chamber that has natural heat isolating properties and may withstand high temperatures at all. Furthermore, Hennebert et al. only disclose the use of plastic for sub-atmospheric pressures. See, for example, claim 3 of Hennebert et al. Consequently, the plastic chamber of Hennebert does not have the same requirements as an autoclave chamber. See, for example, page 2, paragraph (6) of the Declaration Under 37C.F.R.§1.132, filed March 30, 2005.

It is noted that Hennebert et al. disclose in column 2, lines 56-57, that their process can be used up to five times atmospheric pressure. However, it is respectfully noted that Hennebert et al. then disclose in column 2, lines 57-59, that it

is generally advantageous to carry out the process at pressures which do not appreciable exceed atmospheric. Moreover, Hennebert et al. disclose in column 6, lines 6-9, that the steam generator maintains a steam pressure that is at most equal to atmospheric. Furthermore, the pressure in all of the Examples 1-4 provided by Hennebert varies from subatmospheric to atmospheric.

As disclosed in the instant application, some of the advantages of the claimed invention include a cool exterior, less noise, lower consumption of energy, shorter processing time, achievement of dry goods quicker, reduced bacterial build up, and less condensation.

Regarding the advantage of less condensation, Hennebert et al. disclose that less condensation is achieved by avoiding cooling and keeping a constant temperature. See column 6, lines 46-49. Hennebert do not teach or suggest a plastic material that should be suitable to reduce condensation. Furthermore, Hennebert et al. do not disclose or suggest that the plastic material should have heat isolating properties.

For at least the foregoing reasons, it is respectfully submitted that the combination of Huston and Hennebert et al. fails to present a *prima facie* case of obviousness. It is also respectfully submitted that each of Spence, Quehl, Leimbacher et al. and Houston et al. fails to cure the deficiencies of the combination of Huston and Hennebert et al. and even assuming it would have been obvious to combine the references, which Applicants do not concede, such combinations would not include all the features of claim 1 and would not present a *prima facie* case of obviousness.

Respectfully submitted,

BUCHANAN INGERSOLL & ROONEY PC

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By: _____
John P. Darling
Registration No. 44,482

P.O. Box 1404
Alexandria, VA 22313-1404
703 836 6620